

10/506867

DT04 Rec'd PCT/PTO 03 SEP 2004

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IN THE CLAIMS

Please amend claims 3-8 and add new claims 9-29 as shown in the Status of the Claims section, infra.

Additions are underlined and deletions are struck through or enclosed between double brackets.

Amendments to claims 3-8 are merely to avoid multiple dependent claims and not for reasons of patentability.

STATUS OF THE CLAIMS

Claim 1 (original). An optical information recording medium characterized in that a temperature-sensitive layer whose reflectance and/or transmittance reversibly change according to a change in a temperature of the temperature-sensitive layer is formed on a substrate.

Claim 2 (original). A medium of claim 1, wherein the temperature-sensitive layer is formed of a single layer of a temperature-sensitive film or a laminated layer of a temperature-sensitive film and a reflection film.

Claim 3 (currently amended). A medium as recited in ~~claim 1 or 2~~, wherein the temperature-sensitive layer has a light interference effect.

Claim 4 (currently amended). A medium as recited in ~~any one of claim~~[[s]] 1 ~~to 3~~, further comprising a recording and/or reproduction layer.

Claim 5 (currently amended). A medium as recited in ~~any one of claim~~[[s]] 1 ~~to 4~~, wherein the substrate has concavities and convexities in at least a part of a surface thereof.

Claim 6 (currently amended). A medium as recited in ~~of any of claim~~[[s]] 1 ~~to 5~~, wherein a plurality of recording and/or reproduction layers are formed on the substrate, and the temperature-sensitive layer is formed on at least one of the recording and/or reproduction layers.

Claim 7 (currently amended). A medium as recited in ~~of any one of claim~~[[s]] 1-~~to~~6, wherein the temperature-sensitive layer contains a metal oxide.

Claim 8 (currently amended). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in ~~any one of claims 1 to 7~~ with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 9 (new). A medium as recited in claim 2, wherein the temperature-sensitive layer has a light interference effect.

Claim 10 (new). A medium as recited in claim 2, further comprising a recording and/or reproduction layer.

Claim 11 (new). A medium as recited in claim 2, wherein the substrate has concavities and convexities in at least a part of a surface thereof.

Claim 12 (new). A medium as recited in claim 2, wherein a plurality of recording and/or reproduction layers are formed on the substrate, and the temperature-sensitive layer is formed on at least one of the recording and/or reproduction layers.

Claim 13 (new). A medium as recited in claim 2, wherein the temperature-sensitive layer contains a metal oxide.

Claim 14 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 2 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 15 (new). A medium as recited in claim 3, further comprising a recording and/or reproduction layer.

Claim 16 (new). A medium as recited in claim 3, wherein the substrate has concavities and convexities in at least a part of a surface thereof.

Claim 17 (new). A medium as recited in claim 3, wherein a plurality of recording and/or reproduction layers are formed on the substrate, and the temperature-sensitive layer is formed on at least one of the recording and/or reproduction layers.

Claim 18 (new). A medium as recited in claim 3, wherein the temperature-sensitive layer contains a metal oxide.

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Claim 19 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 3 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 20 (new). A medium as recited in claim 4, wherein the substrate has concavities and convexities in at least a part of a surface thereof.

Claim 21 (new). A medium as recited in claim 4, wherein a plurality of recording and/or reproduction layers are formed on the substrate, and the temperature-sensitive layer is formed on at least one of the recording and/or reproduction layers.

Claim 22 (new). A medium as recited in claim 4, wherein the temperature-sensitive layer contains a metal oxide.

Claim 23 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 4 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 24 (new). A medium as recited in claim 5, wherein a plurality of recording and/or reproduction layers are formed on the substrate, and the temperature-sensitive layer is formed on at least one of the recording and/or reproduction layers.

Claim 25 (new). A medium as recited in claim 5, wherein the temperature-sensitive layer contains a metal oxide.

Claim 26 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 5 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 27 (new). A medium as recited in claim 6, wherein the temperature-sensitive layer contains a metal oxide.

Claim 28 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 6 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.

Claim 29 (new). A reproduction method of an optical information recording medium characterized in that the method comprises the steps of: irradiating the medium as described in claim 7 with a light beam to form a spot of the light beam on a temperature-sensitive layer so that a high-temperature region and a low-temperature region are generated; reversibly changing reflectance and/or transmittance on the high-temperature region and the low-temperature region of the temperature-sensitive layer; and reproducing information according to light reflected from a temperature region showing a higher reflectance.